

AMENDMENTS TO THE CLAIMS

1-13. (cancelled)

14. (currently amended) A method of providing nutrition to a subject
~~producing non-human meat products for consumption~~ comprising providing the subject
with a non-human meat product produced by the following steps:

culturing non-human muscle ~~stem~~ cells *ex vivo*;

seeding the non-human muscle ~~stem~~ cells onto a support structure; and

growing the non-human muscle ~~stem~~ cells to produce said a non-human meat
product, wherein said non-human meat product is suitable for consumption.

15. (cancelled)

16. The method in claim 14 further comprising the step:

exposing the non-human muscle cells to an electric or oscillating current.

17. (currently amended) The method in claim 14 ~~43~~ further comprising
the step:

adding nutrients to be incorporated into the non-human meat products.

18. (currently amended) The method in claim 14 ~~43~~ wherein the non-
human muscle cells are derived from animals selected from the group consisting of
mammals, birds, fishes, invertebrates, reptiles, and amphibians.

19. (currently amended) The method in claim 14 ~~43~~ wherein the non-
human meat product is substantially free from harmful microbial contamination.

20. (withdrawn) A method of producing non-human meat for consumption
comprising the steps:

co-culturing non-human muscle cells and non-human fat cells *ex vivo*;

seeding the non-human muscle cells and the non-human fat cells to a support
structure; and growing the non-human muscle cells and the non-human fat cells to
produce a non-human meat product.

21. (withdrawn) A method of producing non-human meat for consumption
comprising the steps of:

culturing non-human muscle stem cells *ex vivo*;

seeding the non-human muscle stem cells to a support structure;

treating the non-human muscle stem cells with fatty acids to trans-differentiate the non-human muscle stem cells into adipocytes; and
growing the adipocytes to produce a non-human meat product.

22. (withdrawn) A method of producing non-human meat products for consumption comprising the steps:

culturing non-human cartilage cells *ex vivo*;
seeding the non-human cartilage cells to a support structure;
culturing non-human muscle cells together with the non-human cartilage cells on or around the support structure; and
growing the non-human muscle cells to produce a non-human meat product.

23. (withdrawn) The method in claim 20 wherein the non-human cartilage cells have been exposed to mechanical stress.

24. (new) The method in claim 14 wherein the non-human muscle cells are skeletal muscle cells.

25. (new) The method in claim 14 wherein the non-human muscle cells are derived from pluripotent or totipotent non-human stem cells.

26. (new) The method of claim 14 further comprising the step:
seeding non-human fat cells onto said support structure,
wherein said non-human fat cells grow in conjunction with said non-human muscle cells to produce said non-human meat product.

27. (new) The method of claim 26 wherein said non-human fat cells are derived from pluripotent or totipotent non-human stem cells.

28. (new) The method of claim 14 further comprising the step:
seeding non-human cartilage cells onto said support structure,
wherein said non-human cartilage cells grow in conjunction with said non-human muscle cells to produce said non-human meat product.

29. (new) The method of claim 28 wherein said non-human cartilage cells are derived from pluripotent or totipotent non-human stem cells.